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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,736	10/03/2001	Chih-Wei Huang	401720-1	1247

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EXAMINER

HARBECK, TIMOTHY M

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/970,736

Applicant(s)

HUANG, CHIH-WEI

Examiner

Timothy M. Harbeck

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/31/2003, 4/21/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are directed to a system, however the bodies of the claims do not recite any structural element that will constitute the claimed system. Thus, it is not clear what the claimed system is comprised of.

Claims 9 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claims 3 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3 and 13 appear to be Markush claims. Thus, the use of "including" makes claims indefinite. The language of "including" must be replaced with "consisting of". See *Ex Parte Morrell*.

Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. A proper dependent claim shall not conceivably be infringed by anything that would not also infringe the basic claim. See MPEp 608.01 (n), Section III. However, the depending claim 10 recites an index generated by the method of claim 1. Applying the infringement test, what is needed to infringe claim 10 for example is an index generated by the method of claim 1. However, such an index would not infringe the method steps of Claim 1 since the index itself is not necessarily generated by the active steps required by the method. In other words, mere possession of such an index would infringe claim 10 but this is not enough to infringe claim 1. As a result, claim 10 is an improper dependent claim.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Software, programming, instructions or code not claimed as encoded on computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in a computer. When such

descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases.

Furthermore, software, programming, instructions or code not claimed as being computer executable are not statutory because they are not capable of causing functional change in a computer. In contrast, when a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer and the program, and the computer is capable of executing the program, allowing the program's functionality to be realized, the program will be statutory.

Claims 11-19 are therefore rejected where there is no indication that the proposed software is recorded on computer-readable medium and/or capable of execution by a computer. Examiner suggests that the applicant incorporate into Claim 11-19 language that the proposed software is recorded on computer-readable medium and capable of execution by a computer to overcome this rejection.

Correction required. See MPEP § 2106 [R-2].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9, 11-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black et al (hereinafter Black, US PAT 6,012,042 in view of Ray et al (hereinafter Ray, US PAT 6,018,722)

Re Claim 1: Black discloses a method for measuring performance of a trading instrument comprising the steps of

- Determining monetary value of shares of each of a particular trading instrument traded during a particular time period (Column 4, lines 25-28)
- Determining volume of said shares traded over said particular time period (Column 4, lines 25-28)

Black does not explicitly disclose the following steps

- Multiplying said monetary value with said volume of shares traded to determine a trading value of said trading instrument for said time period.

Ray discloses an S.E.C. registered individual account investment advisor expert system disclosing that technical analysis of securities derives investment decisions from the study of price and volume information (Column 6, lines 55-56). Ray continues, "Many technical indicators are derived from information regarding quantity of securities traded during a particular time period and price at which the securities traded. (Column 6, lines 61-64)." It would have been obvious to one of ordinary skill in the art at the time of invention to modify Black in view of Ray to multiply value and share information of a particular instrument, which is a simple derivation of this information. The manipulation of price and quantity data is a cornerstone of technical analysis. This information would

allow for a more complete portrait of the technical analysis portion of the Black system, which in turn would provide a more complete portion of the overall system.

Re Claim 2: Black in view of Ray discloses the claimed method supra and Black further discloses wherein said time period further comprises a plurality of successive time periods (Column 4, lines 28-32).

Re Claim 3: Black in view of Ray discloses the claimed method supra and Black further discloses wherein said time period is selected from a group including an hour, a day, a week, a month, a quarter, and a year (See Charts across Columns 5 and 6; Values shown for days and quarters). While the references do not explicitly disclose wherein the time period includes an hour, a week, a month or a year; these time frames are notoriously well known in the art as intervals from which time series can be based. It would have been obvious to one of ordinary skill in the art at the time of invention to include these time periods to the disclosure of Black in view of Ray to further expand the time related information of the price and volume figures.

Re Claims 4-5: Black in view of Ray discloses the claimed method supra and Black further discloses wherein said first determining step further comprises determining said volume for each of said plurality of time periods (Column 4, lines 59-67; specifically lines 63-65) and wherein said second determining step further comprises determining said monetary value for each of said plurality of time periods (Column 4, lines 59-67; charts on columns 5 and 6).

Re Claim 6: Black in view of Ray discloses the claimed method supra but does not explicitly disclose the step wherein said multiplying step further comprises

multiplying said monetary value with said volume for each of said plurality of time periods to provide corresponding trading values, and summing together said trading values corresponding to each of said plurality of time periods to yield a combined trading value for a time duration corresponding to said plurality. However, as was discussed previously with regards to claim 1, Ray discloses an S.E.C. registered individual account investment advisor expert system disclosing that technical analysis of securities derives investment decisions from the study of price and volume information (Column 6, lines 55-56). Ray continues, "Many technical indicators are derived from information regarding quantity of securities traded during a particular time period and price at which the securities traded. (Column 6, lines 61-64)." It would have been obvious to one of ordinary skill in the art at the time of invention to modify Black in view of Ray to multiply value and share information of a particular instrument, which is a simple derivation of this information. The manipulation of price and quantity data is a cornerstone of technical analysis. This information would allow for a more complete portrait of the technical analysis portion of the Black system, which in turn would provide a more complete portion of the overall system. Furthermore, Black discloses a summation technique for certain technical indicators, wherein values corresponding to each of a plurality of time periods are summed to yield a combined value (Column 5, lines 13-48). Therefore it would have been obvious to anyone of ordinary skill in the art at the time of invention to further utilize this summation technique for any such indicator in order to see a cumulative effect of said indicator or value over a particular time period.

Re Claim 7: Black in view of Ray discloses the claimed method supra but does not explicitly disclose the step further comprising calculating an average of said monetary value pertaining to said time period. However, Ray discloses, "Many technical indicators are derived from information regarding quantity of securities traded during a particular time period and price at which the securities traded. (Column 6, lines 61-64)." Taking the average of a value over a particular time period is a very simple derivation from a data set. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Black in view of Ray so that a person analyzing the value data is shown even more statistical data at their disposal. This information would allow for a more complete portrait of the technical analysis portion of the Black system, which in turn would provide a more complete portion of the overall system, specifically in times of volatile price changes.

Re Claim 9: Black in view of Ray discloses the claimed method supra and Black further discloses wherein said trading instrument is selected from a group comprising stocks, bonds, currencies, commodities and the like (Column 4, lines 7-10)

Re Claims 11-17 and 19: Further system claims would have been obvious in order to implement the previously rejected method claims 1-7 and 9 respectively, and are therefore rejected using the same art and rationale.

Claims 8, 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black in view of Ray in view of Downes (John Downes and Jordan Elliot Goodman,

"Dictionary of Finance and Investment Terms;" Fifth Edition. Barron's Educational Series, Inc 1998, pgs. 214-215 and 273).

Re Claim 8 and 10: Black in view of Ray discloses the claimed method supra but does not explicitly disclose the step further comprising generating an index of trading instruments ranked in accordance with trading values. Downes provides the definition of an index as a statistical composite that measures changes in financial markets often expressed in percentage changes from a base period (pg 273). It was well known in the art that these indices, while usually involving price, could be based upon any quantifiable measure as long as the quantity is consistent. It has been previously established that the market value of the float (volume of shares traded * price) of a particular stock or stocks is both well known in the art and valuable in technical analysis. Generating an index involving this quantity as it relates to a number of different stocks would have therefore been obvious to someone skilled in the ordinary art because it is a common measure of liquidity and viewing the changes in the liquidity of one particular stock relative to a basket of stocks would be useful, for comparisons sake, in technical analysis.

Re Claim 18: Further system claim would have been obvious in order to implement the previously rejected method claim 8, and is therefore rejected using the same art and rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Harbeck whose telephone number is 571-272-8123. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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